City of St. Louis Urban Vitality & Ecology Initiative









Connecting people to nature where they live, work, learn and play

Potential Environmental Benefits

A 50% increase in the City's urban tree canopy would sequester 3,731 additional tons of carbon annually and result in \$36.7 million in avoided stormwater costs.¹

Potential Social Benefits

Exposure to nature can significantly reduce stress and anxiety in urban dwellers. Children's regular contact with nature through environmental education or play can provide health and education benefits, including reduced ADHD symptoms, higher academic performance and increased fitness levels.^{2, 3}

Potential Economic Benefits

Parks and other greenspace act as economic engines by increasing adjacent property value and attracting businesses. The Whitmire Study by the University of Missouri-St. Louis found that, between 1990 and 2000, neighborhoods surrounding community gardens in the City of St. Louis showed much greater economic and social resilience, even while the City experienced a broader economic downturn and continued population loss.⁴

Why Encourage Connections to Urban Nature?

Cities have long embraced the importance of greenspace to the social, economic and environmental well-being of their residents: parks, trees and other natural resources improve air and water quality, provide important community gathering spaces, shape neighborhood character, enhance aesthetics and support property values. This understanding is now supported by a growing body of research that quantifies and affirms the many benefits of urban nature.

Seizing the opportunity to better connect people to urban nature in ways that maximize economic potential and result in optimal social benefits will require a bold, long-term vision for the future of the City of St. Louis. The Urban Vitality & Ecology Initiative will advance a process that engages our diverse community, promotes equity and aligns with stakeholder priorities.

Enhanced Urban Nature in the City of St. Louis

As St. Louis works toward a more prosperous and sustainable future, some of its land can be transformed into ecologically significant greenspaces that support economic and social development. The City of St. Louis possesses many natural resource assets - such as its extensive park system and greenspace trails - and also has many people and organizations working to support them, creating great social capital and an important foundation for the Urban Vitality & Ecology Initiative. At the same time, there is also an overabundance of vacant and underutilized land in the City; evidence of decades of social and economic transition, this land provides both a major challenge and an important opportunity.

As we rebuild and improve our city, St. Louis must maintain that which makes cities urban: dense, walkable neighborhoods that support social ties, economic vitality, efficient transit and a rich array of cultural amenities. Having peaked at a population of ~850,000 in 1950, St. Louis now has a population of ~320,000. Planning for future growth to 500,000, St. Louis can create a new urban form emphasizing:

- Attractive and leafy neighborhoods, workplaces and schools;
- Outdoor parks and recreation spaces that promote active living;
- Ecological corridors that provide valuable economic, social and environmental services; and
- Strategically placed nature reserves for exploring, bird watching, hiking and quiet contemplation.



Goals of the Initiative

Immediate

Collaboratively develop and implement a community-based pilot project to test process and techniques.

Near Term

Work with stakeholders to create and maintain an urban natural resources/biodiversity inventory and atlas that reflect current natural assets and future opportunities to enhance, expand and access them.

Longer Range

Develop a citywide Urban Vitality & Ecology Strategic Action Plan that provides the basis for well-informed policy modifications and community-based decisions, strategically prioritizes both redevelopment and key natural resource opportunities, and identifies actionable items for implementation.

What Could Success Look Like?

Imagine a St. Louis 50 years from now, where dense, walkable and attractive neighborhoods are interwoven with socially vibrant and ecologically thriving natural areas. Some examples of Urban Vitality & Ecology Success could be a St. Louis where:

- All residents easily access parks and greenspaces that build community, provide recreation opportunities and celebrate the region's natural heritage;
- Vacant, underutilized land expands its role in the City's economic redevelopment strategy by adding to the City's green infrastructure network, capturing stormwater, cleaning the air, cooling on hot summer days, enhancing neighboring property value and providing recreation for people and habitat for wildlife;
- Every child enjoys a safe place to play outside, develops healthy and active living habits, connects with nature and benefits from access to the natural environment;
- The City and its people reconnect physically and psychologically to the Mississippi River – the largest river in America –as an economic, recreational and cultural asset;
- The only known remnant tallgrass urban prairie serves as a social and economic community amenity and biologically significant ecosystem;
- Restored streams enhance community character, connect people to natural systems and manage stormwater quantity, while improving water quality and safely convey stormwater away from residences; and
- Greenspace corridors support wildlife, promote ecological function, provide community benefits and add to property values.











The Urban Vitality & Ecology Initiative reflects priorities in the City of St. Louis Sustainability Plan and Mayor Slay's Sustainability Action Agenda. For more information about the initiative, visit the City's website at stlouis-mo.gov/sustainability or contact Catherine Werner, City of St. Louis Sustainability Director, at wernerc@stlouis-mo.gov.





¹50% is the additional possible increase in the City of St. Louis's urban tree canopy as determined by Forest ReLeaf of Missouri. St. Louis, MO Urban Tree Canopy (UTC) Assessment. 2010.

² CDC's National Center for Chronic Disease Prevention and Health Promotion. Division of Adolescent and School Health. Childhood Obesity. 20 Oct. 2008. http://www.cdc.gov/HealthyYouth/obesity

³ Ernst, Julie (Athman) and Martha Monroe. "The effects of environment-based education on students' critical thinking skills and disposition toward critical thinking." 10.4 Environmental Education Research, Nov. 2004.

⁴ Corbett, Jean. How Do Community Gardens Impact Social Conditions.